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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/602,457	06/23/2003	Thomas N. Chalin	WCMI-0037	9392	
20558	7590 03/16/2005		EXAM	EXAMINER	
KONNEKER & SMITH P. C.			ROSENBERG, LAURA B		
660 NORTH CENTRAL EXPRESSWAY SUITE 230		AY	ART UNIT	PAPER NUMBER	
PLANO, TX	75074		3616		
			DATE MAILED: 03/16/200	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

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1	Application No.	Applicant(s)	/			
	10/602,457	CHALIN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Laura B Rosenberg	3616				
The MAILING DATE of this community Period for Reply	inication appears on the cover sheet wi	th the correspondence address -	•			
A SHORTENED STATUTORY PERIOD THE MAILING DATE OF THIS COMMU - Extensions of time may be available under the provision after SIX (6) MONTHS from the mailing date of this concluded in the period for reply specified above is less than thirty if NO period for reply is specified above, the maximum Failure to reply within the set or extended period for reply received by the Office later than three month earned patent term adjustment. See 37 CFR 1.704(b).	NICATION. ns of 37 CFR 1.136(a). In no event, however, may a renuncication. (30) days, a reply within the statutory minimum of thirt statutory period will apply and will expire SIX (6) MON by will, by statute, cause the application to become AB is after the mailing date of this communication, even if the statute of the statute of the statute.	eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communication ANDONED (35 U.S.C. § 133).	ation.			
Status						
1) Responsive to communication(s) f						
2a) This action is FINAL .						
3) Since this application is in condition	•	• •	S IS			
closed in accordance with the practice	ctice under <i>Ex parte Quayle</i> , 1935 C.D	. 11, 453 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-19</u> is/are pending in the 4a) Of the above claim(s) is						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-19</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to rest	nction and/or election requirement.					
Application Papers	•					
	04 is/are: a) ☐ accepted or b) ☐ objection to the drawing(s) be held in abeyaning the correction is required if the drawing.	ice. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.12	* *			
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim a) All b) Some * c) None of: 1. Certified copies of the priori		119(a)-(d) or (f).				
<u> </u>	ty documents have been received in A	· ·				
	s of the priority documents have been ional Bureau (PCT Rule 17.2(a)).	received in this National Stage				
* See the attached detailed Office ac	ion for a list of the certified copies not	received.				

Attachment(s)					
1) Notice of References Cited (PTO-892)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)					

Paper No(s)/Mail Date 6-23-03.

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DETAILED ACTION

Drawings

1. The drawings were received on 12 July 2004. These drawings are acceptable.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1, 13, and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Bowman, Jr. (4,203,617). Bowman, Jr. discloses:
- Suspension system (including #10)
- Axle assembly (#10)
- Axle beam (including #12, 14) made of composite material (column 2, lines 39-44)
- King pin receiver (including #22, 24, 26, 28, 52, 54, 56, 58) made of composite material (same as axle beam)
- Axle beam has a portion of an attachment (including #38, 48, 49) for a pivoting arm (radius arm, pivotal connection to frame), attachment made of composite material (same as axle beam)
- Axle beam, king pin receiver, and pivoting arm attachment are integrally formed as a
 single piece (best seen in figures 1, 2)

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4. Claims 1, 13, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Stroh et al. (5,741,027). Stroh et al. disclose:

- Suspension system (best seen in figure 1)
- Axle assembly (including #12, 22)
- Axle beam (#12) made of composite material (column 6, lines 38-42)
- King pin receiver (#22)
- Axle beam has at least a portion of an attachment (including #42) that can be used for a pivoting arm (such as a spring)
- Pivoting arm attachment includes a reinforcement (#70) spanning an interior of axle
 beam (best seen in figure 7)

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Freitas, Jr. et al. (2004/0145144A1) in view of Stroh et al. (5,741,027).

 De Freitas, Jr. et al. disclose:
- Suspension system (best seen in figures 1-4)
- Axle assembly (#10)
- Axle beam (#12)

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 King pin receiver (#34) is a portion of a device (#16) formed separately from the axle beam (best seen in figures 1-4)

- Axle beam has at least a portion of an attachment (including #36) that can be used for a pivoting arm (such as a V-rod)
- Pivoting arm attachment includes a reinforcement (web that connects flanges of the axle beam) spanning an interior of axle beam (best seen in figure 5)
- Device (#16) made of metal (paragraph 0015)
- Device includes axle seat (including #23, 24, 28) complementarily shaped relative to axle beam (best seen in figure 2) and "bonded" to axle beam (best seen in figures 1, 3, 4)
- Device (#16) includes first and second attachments (#38, 40) that can be used for first and second pivoting arms (for example, a longitudinal link)
- Device constructed of attached metal plates (for example, metal forging or casting)
- Device material wrapped around the king pin receiver (best seen in figures 1-4)
- King pin receiver, axle seat, and pivoting arm attachment integrally formed in device (best seen in figures 1-4)
- Axle beam, king pin receiver, and pivoting arm attachment are integrally formed as a since piece (best seen in figures 1-4)

Though not specifically shown, based on the configuration of the reinforcement (web within axle beam) and the location of the pivoting arm attachment (#36) on the axle beam (#12), the fasteners (not labeled, but best seen in figure 3) would extend through the reinforcement.

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De Freitas, Jr. et al. do not disclose the axle beam, device, king pin receiver, or pivoting arm attachment being made of composite material. Stroh et al. teach a suspension system comprising an axle assembly (including #12, 22) including an axle beam (#12) made of composite material. It would have been obvious to one skilled in the art at the time that the invention was made to modify the axle beam, device, king pin receiver, and pivoting arm attachment of De Freitas, Jr. et al. such that they comprised composite material as claimed in view of the teachings of Stroh et al. so as to allow the components to achieve specific desired properties resulting from a certain material choice (Stroh et al.: column 6, lines 38-42). In addition, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Further, De Freitas, Jr. et al. disclose that the axle beam and device can be made from any material and process (paragraph 0015). Finally, the method of forming is not germane to the issue of patentability, and thus has not been given patentable weight.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cornacchia et al. disclose a suspension system comprising an axle assembly including an axle beam having a pivoting arm attachment.

Pollock et al., Shealy, Paddison, Link, Dauber et al. each disclose a suspension system comprising an axle assembly including an axle beam and king pin receiver.

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Keeler et al. and Beck et al. each disclose a suspension system comprising an axle assembly including an axle beam and king pin receiver, the axle beam having a pivoting arm attachment.

Haycraft discloses a suspension system comprising an axle assembly including an axle beam and king pin receiver, the axle beam made of either composite or metal material.

Smith, Schlosser et al., and Sakamoto et al. each disclose a suspension system comprising an axle assembly including an axle beam and king pin receiver, the king pin receiver being a portion of a device separate from the axle beam.

Tremouilles and Etzold each disclose a suspension system comprising an axle assembly including an axle beam with a reinforcement spanning an interior of the axle beam.

Lawson et al. disclose a suspension system comprising an axle assembly including an axle beam having a pivoting arm attachment and made of composite material.

Varela discloses a suspension system comprising an axle assembly including an axle beam and a device separate from the axle beam.

Duran discloses a suspension component made of both metallic and nonmetallic, specifically composite, parts.

Nussbaumer discloses a suspension system comprising an axle assembly including an axle beam made of a composite material.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura B Rosenberg whose telephone number is (703) 305-3135. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (703) 308-2089. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Beginning April 7, 2005, Laura B Rosenberg can be reached at the new USPTO location at (571) 272-6674, and Paul Dickson can be reached at (571) 272-6669.

Laura B Rosenberg Patent Examiner Art Unit 3616

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